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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,347	10/18/2000	Douglas S. Reeves	7000-041	3967
27820	7590	07/01/2005	EXAMINER	
WITHROW & TERRANOVA, P.L.L.C. P.O. BOX 1287 CARY, NC 27512			SHIN, KYUNG H	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/691,347		REEVES ET AL.	
	Examiner		Art Unit	
	Kyung H. Shin		2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/18/2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14,20-29 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14,20-29 and 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. This action is responding to application papers filed 8/11/2004.
2. Claims 1 - 14, 20 - 29, 33 - 36 are pending. Claim 15 - 19, 30 - 32 have been canceled. Independent claims are 1, 5, 9, 20, 24, 27, 33.

Response to Arguments

3. Applicant's arguments filed 8/11/2004, with respect to the rejection(s) of claim(s) under Eriksson et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made with Eriksson et al in view of Chang et al.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 14, 20 - 29, 33 - 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson et al. (U.S. Patent No. 6,661,806) in view of Chang et al.

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(US Patent No. 6,058,113).

Regarding Claims 1, 33, Eriksson discloses a method, communication server and software of authorizing communications comprising:

- a) receiving a request for authorization to establish a communication with a destination terminal from an origination terminal; (see Eriksson col. 3, lines 3-6: *When a user requires communications between two nodes, a resource request, including authentication, is generated and transmitted.*)
- b) generating authorization indicia for the communication, the authorization indicia configured to enable reservation of resources for the communication; (see Eriksson col. 3, lines 6-10: *The specified request parameters required to complete the communications between the origination and destination terminals are within the request. Parameters: bandwidth, traffic class, source address, destination address.*)

Eriksson discloses wherein the at least one of the originating and destination terminals receiving the authorization indicia will send the authorization indicia to at least one network element to reserve resources for at least a portion of the communication. (see Eriksson col. 3, lines 31-35: *When the required reservation parameters are authenticated and if required resources are available, the resources are reserved for the communications.*) Eriksson does not disclose the capability to send resource reservation information upstream to a sender (i.e. originating) network node. However, Chang discloses:

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c) sending the authorization indicia to at least one of the originating and destination terminals to facilitate reservation of resources for the communication (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12: “ ... *efficiently maintaining correct resource reservation along a multicast path even when network routing is changed at the switching nodes and when other state changes in the network occur ...* ”)

Regarding Claims 2, 21, 34, Eriksson discloses wherein the originating and destination terminals receiving the authorization indicia will send the authorization to corresponding network elements forming part of the communication path to reserve resources for portions of the communication. (see Eriksson col. 3, lines 28-30: *Each node in the communications path performs resource reservation after authentication of requests.*)

Eriksson does not disclose the capability to send resource reservation information upstream to a sender (i.e. originating) network node. However, Chang discloses the method of claims 1, 20, 33 wherein the sending step comprises sending the

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authorization indicia to the originating and destination terminals to facilitate reservation of resources for the communication. (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating network node))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12)

Regarding Claims 3, 22, 35, Eriksson discloses the method of claims 1, 20, 33 further comprising verifying the user of the originating terminal is capable of receiving services providing the communication. (see Eriksson col. 4, lines 32-36: *A user's request is authenticated against current policy rules to determine if the particular user is authorized to reserve the requested resources.*)

Regarding Claims 4, 23, 36 Eriksson discloses the method of claims 1, 20, 33 wherein the step of generating authorization indicia comprises authenticating the authorization indicia for use by the at least one network element. (see Eriksson col. 4, lines 32-36: *Authentication is verified against the current policy rules for users and nodes.*)

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Regarding Claim 5, Eriksson discloses a method of authorizing communications comprising:

- b) reserving resources for at least a portion of the communication based on the authorization indicia. (see Eriksson col. 3, lines 31-35: *Resources are reserved based on communication requirements.*)

Eriksson discloses receiving a request from at least one of an originating terminal and a destination terminal to reserve resources for a communication between the originating terminal and the destination terminal, (see Eriksson col. 2, lines 59-65) and configured to enable reservation of resources for the communication; (see Eriksson col. 1, lines 48-52; *The user's contract with the service (network) provider is the basis for the authentication of resource reservation. When a user requires communications, a resource request is generated and transmitted.*) Eriksson does not disclose the capability for a sending node to receive resource reservation information. However, Chang discloses:

- a) the capability to send reservation information upstream to a sender (i.e. originating) terminal wherein the request associated with authorization indicia provided to the originating terminal by a service provider. (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send

reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to optimize and efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12)

Regarding Claim 6, Eriksson discloses the method of claim 5 wherein the receiving step comprises receiving requests from both the originating and destination terminals and the reserving step comprises reserving resources for the communication at a first network element associated with the originating terminal using the request received from the originating terminal and reserving resources for the communication at a second network element associated with the destination terminal using the request received from the destination terminal. (see Eriksson col. 3, lines 28-30: *Each node in communications path performs resource reservation after authentication is verified.*)

Regarding Claim 7, Eriksson discloses the method of claim 6 further comprising provisioning for resources for the communication over a network between the first and second network elements based on the authorization indicia. (see Eriksson col. 10, lines 42-46: *The requested resources have been reserved along the communication path from origination to destination.*)

Regarding Claim 8, Eriksson discloses the method of claim 5 further comprising

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establishing a second communication from the destination terminal to the original destination and reserving resources for at least a portion of the second communication based on the authorization indicia. (see Eriksson col. 10, lines 42-46: *Each node along a portion or the entire communications path (i.e. first or second communications path) performs resource reservation after authentication is verified.)*

Regarding Claims 9, 27, Eriksson discloses a terminal for effecting communications comprising a network interface and a control system (see Eriksson col. 10, lines 16-20: *resource management controller system*) associated with said network interface, said control system adapted to:

- a) send a request to establish a communication with a remote terminal over a network to a service provider; (see Eriksson col. 2, lines 59-65; col. 3, lines 3-6: *Quality of service and service differentiation are provided by contract between service (network) provider and user. A resource request is generated and transmitted, when a user requires communications over the network.)*
- b) receive authorization indicia configured to enable reservation of resources for the communication from the communication server in response to the request to establish the communication; (see Eriksson col. 3, lines 11-13:)
- c) send a request associated with the authorization indicia to a network element to reserve resources for the communication wherein the authorization indicia is configured to enable the network element to reserve sufficient resources for at least a portion of the communication. (same as 1.c: *When the required*

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reservation parameters are authenticated and required resources are available, the resources are reserved for the communications.)

Regarding Claim 10, Eriksson discloses the terminal of claim 9 wherein said control system is further adapted to effect the communication over a communication path having the reserved resources with the destination terminal via the network element.

(see Eriksson col. 10, lines 35-40: A resource management control system handles all authentication and resource reservation with a network or set of subnetworks.)

Regarding Claims 11, 29, Eriksson discloses the terminal of claim 10, 28 wherein said control system is adapted to effect a second communication over a second communication path with the destination terminal via the network element. (same as 10: *A resource management control system handles authentication and resource reservation with a network for a first or second communications path.*)

Regarding Claim 12, Eriksson discloses the terminal of claim 9 wherein said terminal is a cable terminal and said control system facilitates at least one of the group consisting of receiving or transmitting audio and video via the communication. (see Eriksson col. 3, lines 6-10: *Audio and video communications requires a consistent and dedicated amount of bandwidth along communications path during entire transmission.*

Reservation of resources specifies a bandwidth requirement for the entire transmission.

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Regarding Claim 13, Eriksson discloses the terminal of claim 9 wherein said terminal is a telephony terminal and said control system facilitates at least one of the group consisting of receiving or transmitting audio via the communication. (same as 12)

Regarding Claim 14, Eriksson discloses the terminal of claim 9 wherein said terminal is a receiver and said control system facilitates at least one of the group consisting of receiving at least one of the group consisting of audio and video via the communication. (same as 12)

Regarding Claim 20, Eriksson discloses a router for effecting a communication comprising a network interface and a control system associated with said network interface, said control system adapted to:

- a) receive a request to reserve resources for a communication between the originating terminal and the destination terminal, the request associated with authorization indicia provided to the originating terminal by a service provider and configured to enable reservation of resources for the communication; (same as 1.a)
- b) reserve resources for at least a portion of the communication based on the authorization indicia; (same as 1.c)
- c) route information to effect the communication. (see Eriksson col. 10, lines 58-60)

Regarding Claim 24, Eriksson discloses a policy server for approving resource reservation for a router in a network, said policy server (see Eriksson col. 4, lines 32-36: *policy rule based authentication*) comprising a network interface and a control system associated with said network interface, said control system adapted to:

- a) receive a request to approve reservation of resources for a communication from a router, the request including authorization indicia configured to enable reservation of resources for the communication; (same as 2: *Each node (i.e. router, network device) in the communications path performs resource reservation after authentication of requests.)*
- b) determine whether to approve the reservation of resources for the communication based on the authorization indicia; (see Eriksson col. 3, lines 30-31: *Resource reservation is performed for each node after authentication of requests*)
- c) send a response to the request to the router indicating whether the request for the reservation of resources was approved. (see Eriksson col. 3, lines 31-35: *An ACK is sent through the communications path if the reservation resource requirements are approved.)*

Regarding Claim 25, Eriksson discloses the policy server of claim 24 wherein said control system is further adapted to communicate with a service provider to confirm the reservation of resources is appropriate based on the authorization indicia. (see Eriksson col. 2, lines 59-65: *The service (network) provider's contract with the user determines*

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whether it is appropriate to allow the reservation of resources.)

Regarding Claim 26, Eriksson discloses the policy server of claim 24 wherein said control system is further adapted to communicate with an authentication service to confirm the authorization indicia is authentic. (see Eriksson col. 3, lines 39-45: *Digital Signature technology is used to determine authenticity and to prevent alteration of reservation information.)*

Regarding Claim 28, Eriksson discloses the computer readable medium of claim 27 comprising further instructions to effect the communication over a communication path having the reserved resources with the destination terminal via the network element. (see Eriksson col. 4, lines 11-14: *Authenticated data packets are transmitted over the communications path from the origination to the destination (receiving) terminal.)*

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KHS
Kyung H Shin
Patent Examiner
Art Unit 2143

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June 22, 2005


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